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In the Supreme Court of the United States.

OCTOBER TERM, 1984.

COMPUTERVISION CORPORATION,
PETITIONER,

v.

THE PERKIN-ELMER CORPORATION, RESPONDENT.

Petition for a Writ of Certiorari to the United States Court of Appeals for the Federal Circuit.

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Questions Presented.

- I. Whether a defendant in a patent infringement action is effectively denied its Seventh Amendment right to a jury trial, when the district court refuses to order a retrial of the issue of validity after an appellate court has negated the jury's requisite factual findings on the differences between the prior art and the patent claims at issue?
- II. Whether the Court of Appeals for the Federal Circuit misconstrued this Court's decisions which instruct district courts to enter only a judgment of noninfringement when a jury finds patents valid but not infringed?
- III. Whether the decisions of the Federal Circuit and Ninth Circuit Courts of Appeals in this case are irreconcilably inconsistent?



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In the Supreme Court of the United States.

OCTOBER TERM, 1984.

COMPUTERVISION CORPORATION, PETITIONER,

V.

THE PERKIN-ELMER CORPORATION, RESPONDENT.

Petition for a Writ of Certiorari to the United States Court of Appeals for the Federal Circuit.

Computervision Corporation petitions that a writ of certiorari issue to review the judgment of the United States Court of Appeals for the Federal Circuit.

Opinions Below.

The opinion of the United States Court of Appeals for the Federal Circuit rendered on April 6, 1984 is not yet officially reported. A copy of that opinion and the order denying Computervision Corporation's petition for rehearing, entered on May 2, 1984, is attached as Appendix A. The unreported judgment entered by the United States District Court for the

Northern District of California on March 18, 1983, is attached as Appendix B. An earlier opinion of the United States Court of Appeals for the Ninth Circuit rendered on July 2, 1982, is reported at 680 F.2d 669. A copy of that opinion is attached as Appendix C. The original unreported judgment of non-infringement, entered by the United States District Court for the Northern District of California on January 23, 1980, is attached as Appendix D.

Jurisdiction.

The judgment of the United States Court of Appeals for the Federal Circuit was entered on April 6, 1984; that court denied a petition for rehearing on May 2, 1984. Jurisdiction to review that judgment by writ of *certiorari* exists pursuant to 28 U.S.C. § 1254(1).

Constitutional Provisions and Statutes Involved.

UNITED STATES CONSTITUTION.

Amendment VII:

In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law.

PATENT ACT OF 1952.

United States Code, Title 35, § 103:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Statement of the Case.

The Perkin-Elmer Corporation ("Perkin-Elmer") manufactures and markets a device known as a projection aligner. This device utilizes projection optics to trace a circuit design onto a silicon wafer. The tracing then is used to manufacture semiconductor integrated circuits. Perkin-Elmer holds two patents, Offner Patent No. 3,748,015 (the "Offner patent") and Scott Patent No. 3,821,763 (the "Scott patent"), that purportedly protect the optics in its projection aligner.

The petitioner Computervision Corporation ("Computervision"), also manufactured and marketed a projection aligner, the Cobilt CA-3000. While Computervision's projection aligner employs optics principles similar to those of the Perkin-Elmer projection aligner, there are marked differences between the two devices. The image-forming system of the Computervision projection aligner consists of axially spaced concave and convex spherical mirrors. Light is reflected from the concave mirror to the convex mirror, back to the concave mirror and finally to the silicon wafer. In Computervision's projection aligner, the radius of the convex mirror is exactly one-half the size of the radius of the concave mirror. In addition, the centers of curvature of the mirrors in the Computervision device are displaced from each other; this displacement makes the centers of curvature of the Computervision device non-concentric. In

contrast, the radius of the convex mirror of the Perkin-Elmer projection aligner is more than one-half the size of the radius of the concave mirror, and the centers of curvature of the Perkin-Elmer projection aligner's mirrors are concentric.

In 1977, Perkin-Elmer brought suit against Computervision in the United States District Court for the Northern District of California, which resulted in a disjointed and inconsistent series of proceedings which the Court of Appeals for the Federal Circuit ultimately characterized as a "procedural morass" (App. A. 2a). In its complaint, Perkin-Elmer alleged infringement of the Offner and Scott patents. Computervision counterclaimed, seeking a declaratory judgment that the Offner and Scott patents were not valid, or in the alternative, that Computervision had not infringed them. Computervision specifically contended (1) that the most pertinent prior art disclosed an optical system employing a non-concentric 2:1 placement of the mirrors; (2) that Perkin-Elmer's patents could only be valid if distinguished from this prior art by reference to the concentric non-2:1 system revealed in the patent claims; (3) that if the Offner and Scott patents are so interpreted, Computervision's projection aligner could not infringe because, like the prior art, it utilized a non-concentric 2:1 optical system; and (4) that, alternatively, if the patent claims were interpreted to encompass Computervision's non-concentric 2:1 system, then the patents must be found obvious and invalid in view of the prior art.

Following a jury trial on the issues of validity and infringement only, both parties moved for directed verdicts, which

The District Court previously had bifurcated the issues of liability and damages. While the District Court's judgment of validity and infringement was on appeal to the Court of Appeals for the Federal Circuit, the District Court conducted a separate trial on the issue of damages. At that trial, Perkin-Elmer claimed damages totaling \$40 million. No decision on the issue of damages has yet been rendered.

motions were denied. In response to the District Court's interrogatories, the jury returned verdicts that claims 1 through 8 of the Offner and Scott patents were valid, but not infringed. The District Court denied Perkin-Elmer's motions for a judgment notwithstanding the verdict and for a new trial, and properly entered a judgment of non-infringement only (App. D. 35a).

On appeal to the United States Court of Appeals for the Ninth Circuit, Perkin-Elmer argued that the issue of infringement was a matter of law, and that the District Court erred in failing to grant its motion for a judgment notwithstanding the verdict. The Ninth Circuit did not consider the issue of validity but merely "presumed that the Offner and Scott patents were valid" and then, contrary to the District Court, concluded that no facts relating to the issue of infringement were in dispute (App. C. 32a). On its view of the facts, the Ninth Circuit concluded, again contrary to the District Court and jury, that the differences between Computervision's and Perkin-Elmer's projection aligners were "miniscule." Accordingly, the court reversed the District Court's judgment of non-infringement (App. C. 33a). The Ninth Circuit subsequently denied Computervision's request for a rehearing *en banc*.

On remand to the District Court, Perkin-Elmer moved for entry of a judgment that the Offner and Scott patents were valid and that Computervision had infringed the claims of those patents. Although the District Court indicated that it agreed with Computervision's contention that, in view of the similarities between the prior art and the Computervision projection aligner, Perkin-Elmer's patent claims could not be both valid and infringed, it felt compelled to enter judgment on the basis of the jury's verdict of validity, and the Ninth Circuit's substituted "verdict" of infringement (App. B. 28a-29a). Computervision then filed a motion for judgment notwithstanding the jury's earlier verdict of validity and a motion for a new trial

on the factual issues "underlying the determination of nonobviousness" (App. A. 4a). The principal basis for Computervision's motions were that "the original jury had not interpreted the patent, on the basis of the court's instructions, in the way the Ninth Circuit had done . . ." (App. A. 27a), and that Computervision therefore was entitled to a new trial so that the factual findings relating to the issue of validity and required by this Court's decision in *Graham v. John Deere Co.*, 383 U.S. 1 (1966) could be made by a jury fully advised of the scope of the patents defined by the Ninth Circuit. Although the District Court indicated great concern with the decision of the Ninth Circuit, the District Court nevertheless felt constrained by that decision to deny Computervision's motions.

Computervision appealed this second judgment to the newlyformed United States Court of Appeals for the Federal Circuit,² contending that the District Court erred in denying its motion for a judgment notwithstanding the verdict on the issue of validity, or in the alternative, for a new trial. In addition, Computervision sought review and reversal of the Ninth Circuit's decision with reinstatement of the original jury verdict of non-infringement.

The panel majority of the Court of Appeals for the Federal Circuit rejected these claims, and affirmed the District Court's judgment on validity and infringement (App. A. 1a-25a). The panel majority held that the District Court gave appropriate weight to the jury's verdict on validity and had not erred in denying Computervision's motion for judgment notwithstand-

² The Federal Circuit was created by the Federal Courts Improvement Act of 1982, § 101; 28 U.S.C. § 41 (1982), to replace the U.S. Court of Customs and Patent Appeals, and the U.S. Court of Claims. It has exclusive jurisdiction to review appeals from a final decision of the U.S. District Court if the District Court's jurisdiction was based, in whole or in part, on 28 U.S.C. § 1338. Federal Courts Improvement Act of 1982, § 127; 28 U.S.C. § 1295 (1982). The Court held its inaugural session on October 1, 1982.

ing that verdict (App. A. 5a-18a). The panel majority further determined that the District Court correctly relied upon the jury's "presumed" findings (leading to the jury's verdict on validity) in reaching its decision on non-obviousness, and concluded that the mere possibility that the Ninth Circuit's interpretation of the claims differed from those of the jury was not tantamount to the loss of the right to a jury trial (App. A. 18a-21a). Holding that Computervision failed to make a "convincing showing" that the Ninth Circuit erred in its decision, the panel majority also refused to reconsider the merits of the infringement question (App. A. 21a-23a).

In a brief but forceful dissent, Judge Davis stated that, in his view, the District Court abused its discretion in refusing to grant Computervision a new trial on the issue of validity. Judge Davis specifically recognized the anomaly which the panel majority had ignored: that the jury, in finding validity but not infringement, interpreted the Offner and Scott patent claims in a narrower manner than the Ninth Circuit. Accordingly, Judge Davis concluded, Computervision was not bound by the jury's earlier verdict of validity but instead was entitled to a new trial of the factual findings required by Graham v. John Deere Co., supra "with respect to the Ninth Circuit's interpretation of the [patent] claims" (App. A. 27a).

On April 20, 1984, Computervision filed a petition for rehearing by the original panel. On May 2, 1984, that petition was denied.

Reasons for Granting the Writ.

I. THE DISTRICT COURT'S FAILURE TO RETRY THE VALIDITY ISSUE AFTER THE NINTH CIRCUIT HAD REDEFINED THE SCOPE OF THE PATENT CLAIMS EFFECTIVELY DENIED COMPUTERVISION ITS SEVENTH AMENDMENT RIGHT TO A JURY TRIAL AND RAISES IMPORTANT QUESTIONS CONCERNING THE PROPER PROCEDURE FOR A JURY TRIAL OF PATENT ACTIONS.

A process or device is patentable (and the corresponding patent claim valid) under the Patent Act of 1952, 35 U.S.C. § 1 et seq., if it satisfies the explicit statutory conditions of novelty, utility and nonobviousness. In Graham v. John Deere Co., supra, this Court held that, while the final determination of a patent's validity is one of law, section 103 of the 1952 Act requires that the trier of fact make "several basic factual inquiries" in order to determine the obviousness or nonobviousness of the subject matter. Id. at 17. Specifically, "the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved." Id.

The issues of validity and infringement were tried before a jury. To reach its conclusion that the patent claims at issue were valid, the jury was required first to determine the scope and content of the prior art, and then to ascertain whether, given that scope, the claims at issue were sufficiently distinct so as not to "have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. § 103. This factual determination of the "differences between the prior art and the claims at issue" is a condition precedent to the District Court's determination of obviousness as a matter of law and can only be made after the jury considers the precise scope of the patent claims at issue.

Here, the jury considered the scope of Perkin-Elmer's patent claims, examined the prior art in light of those claims and concluded that the Offner and Scott patents were valid. Then, employing the same interpretation of the Offner and Scott patent claims, the jury determined that Computervision's projection aligner did not infringe on those patents and consequently rendered a verdict of non-infringement. The District Court then properly adhered to those decisions of this Court which direct a trial court to enter only a judgment of non-infringement when a jury has found patent claims valid but not infringed, Altvater v. Freeman, 319 U.S. 359, 363 (1943); Electrical Fittings Corp. v. Thomas & Betts Co., 307 U.S. 241, 242 (1939); see also text at 13 through 14 infra,³ and entered a judgment of non-infringement only.

On appeal, the Ninth Circuit "presumed" but did not decide that the patents at issue were valid, yet disagreed with the jury's verdict of non-infringement (App. C. 32a-33a). In so holding, the Ninth Circuit necessarily adopted a new and different determination of the scope of the patents in issue which was expansive enough to include the Computervision projection aligner. The necessary consequence of this broader interpretation of the Offner and Scott patents was to effectively negate the jury's determination of the differences between the prior art and the patent claims at issue, as the jury had defined them.

This Court has unequivocally stated that "[t]o hold a patent valid if it is not infringed is to decide a hypothetical case." Altvater v. Freeman, 319 U.S. 359, 363 (1943). When a District Court concludes that it must dismiss a patent complaint for failure to prove infringement, the issue of the patent's validity is rendered "immaterial" to the disposition of the matter. Id. Indeed, this Court has held that defendants in patent litigation are entitled to have a decree of "valid, but not infringed" reformed, so that the lower court enters a judgment of non-infringement only. Electrical Fittings Corp. v. Thomas & Betts Co., 307 U.S. 241, 242 (1939). The defendant is then free to contest the validity of the patent claims should further litigation follow.

The District Court could well have preserved Computervision's constitutional right to a jury trial had it not, on remand, denied Computervision's motion for a new trial on validity in light of the Ninth Circuit's construction of the patent claims at issue. Although the District Court apparently disagreed with the Ninth Circuit's judgment of infringement, and recognized that the jury had not interpreted the patent claims in the same manner as had the Ninth Circuit, it declined to grant reconsideration of the "obviousness" factual findings required by *Graham* only because it considered itself bound by the Ninth Circuit's decision (App. A. 26a-27a) (Davis, J., dissenting). The Court of Appeals for the Federal Circuit affirmed.

This "procedural morass" has led to far more than merely an erroneous finding of validity and infringement of the patent claims at issue. Instead, the result is that Computervision has been denied its right to have the jury determine the differences between the prior art and the claims at issue as defined by the Ninth Circuit, in contravention of both the Seventh Amendment and this Court's holding in *Graham*.

More importantly, the procedure by which Computervision was denied its right to a jury trial on the issue of validity is the result of an improper extension and misapplication of well-established principles of federal patent law which could have far reaching ramifications. The jury first properly made its findings of validity but non-infringement. The District Court then followed the holdings of *Betts* and *Altvater* and entered a judgment of non-infringement only. When the Ninth Circuit reversed this judgment, the question confronting the District Court was whether Computervision now was entitled to a new

⁴On remand, the District Court indicated from the bench that the Ninth Circuit's interpretation of the patent, absent any supporting jury findings, was "absurd" and constituted a position "with which I strongly take issue." Moreover, the District Court agreed that the patents could not be both valid and infringed (App. A. 26a) (Davis, J., dissenting).

jury trial on the factual findings required by Graham v. John Deere Co., supra. On this issue, neither this Court nor any lower court has provided any direction. The District Court thus was presented with an issue of apparently first impression which it resolved in a manner which deprived Computervision of its right to a jury trial.

Both the number of patent suits commenced in federal district courts and the number of patent suits tried to juries has steadily increased in recent years. If courts continue to properly apply the directive of *Altvater* and *Betts*, the precise issue which confronted the District Court on remand may arise frequently.

In its briefs to the Court of Appeals for the Federal Circuit, Perkin-Elmer cited Continental Oil Co. v. Cole, 634 F.2d 188 (5th Cir.), cert. denied, 454 U.S. 830 (1981); Weidman Metal Masters v. Glass Master Corp., 623 F.2d 1024 (5th Cir. 1980), cert. denied, 450 U.S. 982 (1981); Olympic Fastening Systems, Inc. v. Textron, Inc., 504 F.2d 609 (6th Cir. 1974), cert. denied, 420 U.S. 1004 (1975); Laser Alignment, Inc. v. Woodruff & Sons, Inc., 491 F.2d 866 (7th Cir.), cert. denied, 419 U.S. 874 (1974); Crane Company v. Aeroquip Corp., 504 F.2d 1086 (7th Cir. 1974); Ziegler v. Phillips Petroleum Co., 483 F.2d 858 (5th Cir.), cert. denied, 414 U.S. 1079 (1973); Harrington Mfg. Co. v. White, 475 F.2d 788 (5th Cir.), cert. denied, 414 U.S. 1040 (1973); Wilson Research Corp. v. Piolite Plastics Corp., 327 F.2d 139 (1st Cir. 1963); Hansen v. Colliver, 282 F.2d 66 (9th Cir. 1960); and No-Joint Concrete Pipe Co. v. Hanson, 344 F.2d 13 (9th Cir.), cert. denied, 382 U.S. 843 (1965) as standing for the proposition that, on remand after reversal of a judgment of non-infringement, no new trial on the issue of validity is required. In each of these cases, the issues of validity and infringement were originally tried to the court without a jury, and the lower court entered findings on both issues. In most of the cases, the Court of Appeals then considered and ruled on the issue of validity. Accordingly, there were no remaining issues open for decision by the lower court. Here, in contrast, the Ninth Circuit did not rule on the issue of validity and, on remand, the original fact-finder - the jury was not available to supplement its findings as would have been the case had the action been tried without a jury.

⁶ For the twelve month period ending June 30, 1979, for example, 801 patent cases were filed, 73 went to trial, and 13 were tried before a jury. For the corresponding period ending June 30, 1983, 940 cases were filed, 112 went to trial, and 24 were tried before a jury. Annual Report of the Director of the Administrative Office of the United States Courts (1983 and 1979).

To avoid recurrence of the "procedural morass" which resulted in deprivation of Computervision's right to a trial by jury, this Court should grant *certiorari*.

In addition, guidance from this Court is essential to the efficient and fair resolution of patent claim disputes. As modern technology increases in sophistication and complexity, "nonobvious" improvements in scientific and medical devices have become more and more incremental. While two such devices may appear similar, especially to laymen, the challenged product may in fact contain innovations that render it distinct from the claims at issue, but which are only perceptible when viewed in the context of the prior art.

In this situation, a jury's *Graham* findings become crucial. If, as here, an appellate court is allowed to overturn a non-infringement jury verdict on the basis of an interpretation of the patent claims different from that made by the jury without a subsequent retrial on the validity issue, a patent claim may take on two different scopes — a narrow scope that leads to a jury finding of non-obviousness when compared to the prior art, and a wider scope that prevents anything short of a major technological development from surviving an infringement action. This surely cannot have been the intent of the Congress or the courts in their development of the present body of patent law over the past two hundred years. Nevertheless, this will be the result if the decision of the Court of Appeals for the Federal Circuit is permitted to stand. For this additional reason, certiorari is warranted.

II. THE COURT OF APPEALS FOR THE FEDERAL CIRCUIT MIS-CONSTRUED THIS COURT'S INSTRUCTION THAT DISTRICT COURTS ENTER ONLY A JUDGMENT OF NON-INFRINGEMENT WHEN A JURY FINDS PATENT CLAIMS "VALID, BUT NOT INFRINGED."

As discussed above, this Court's decisions in Betts and Altvater direct that a district court enter only a judgment of infringement when a jury finds patent claims valid but not infringed. See text supra at 9. The policy behind this procedure is as vitally important to patent holders today as it was when first announced by this Court in 1939. When district courts enter a judgment of "valid, but not infringed," they render an advisory opinion on a patent's validity that carries the weight of judicial authority. A patent holder, therefore, may claim infringement by a competitor, and though no such infringement has occurred, the holder, by having litigated the validity of his claims, gains a tremendous advantage that he may wield in all future infringement actions. The decisions of this Court in Betts and Altvater proscribe this result.

This line of cases and its underlying rationale has been misconstrued by the Federal Circuit, which now has sole jurisdiction over patent appeals. In response to Computervision's contention that it had effectively been denied the right to a jury trial, the Federal Circuit offered that no validity judgment was entered for "reasons . . . which are not known" and reprimanded Computervision for failing to object to the District Court's entry of only a judgment of non-infringement. In the view of the Federal Circuit, Computervision could have readily avoided its present "plight" had it not "accepted" the

⁷This confusion may stem from a line of cases that appear to support a contrary policy, "that invalid claims shall not remain in terrorem of the art." Royal Typewriter Co. v. Remington Rand, Inc., 168 F.2d 691 (2d Cir.), cert. denied, 335 U.S. 825 (1948).

District Court's refusal to enter judgment on validity (App. A. 19a).

The Federal Circuit's decision is manifestly contrary to and a demonstration of a degree of confusion concerning this Court's previous pronouncements on this very issue. No other explanation can adequately account for the Federal Circuit's conclusion that Computervision and the District Court erred by "accepting" this Court's explicit rulings in *Betts* and *Altvater*. In order to ensure that the Court of Appeals for the Federal Circuit follows this Court's established procedural guidelines for patent disputes and to prevent that court from penalizing litigants for their adherence to those guidelines, this Court should grant *certiorari*.

III. THE OPINIONS OF THE FEDERAL AND NINTH CIRCUIT COURTS OF APPEALS ARE IRRECONCILABLY INCONSISTENT.

In concluding that the Offner patent was not obvious and therefore valid, the Federal Circuit addressed the differences between that patent and the prior art (App. A. 14a). The most important prior art before the Federal Circuit was a patent described as the Reed patent (No. 3,190,171), the optical design of which bears a striking resemblance to that of the Offner patent. In distinguishing the Reed patent, the Federal Circuit panel majority emphasized two important features of the Reed system: (1) that the Reed patent employs concentric

^{*}The District Court also was bound by Ninth Circuit precedent, which has adopted this rule as well. See Velo-Bind, Inc. v. Minnesota Mining & Mfg. Co., 647 F.2d 965, 971 (9th Cir.), cert. denied, 454 U.S. 1093 (1981); Mobil Oil Corp. v. Filtrol Corp., 501 F.2d 282, 293-94 (9th Cir. 1974); R.H. Baker & Co. v. Smith-Blair, Inc., 331 F.2d 506, 507-08 (9th Cir. 1964); Kemart Corp. v. Printing Arts Research Laboratories, Inc., 201 F.2d 624, 634 (9th Cir. 1953); Patent Scaffolding Co. v. Upright, Inc., 194 F.2d 457, 461 (9th Cir.), cert. denied, 343 U.S. 958 (1952).

mirrors, and (2) that the radii of the mirrors in the Reed system have a ratio of 2:1 (App. A. 14a). The Federal Circuit distinguished Perkin-Elmer's Offner patent by the fact that it employs concentric mirrors with a *non-2:1 radii ratio*, and stated that:

Though Reed said he modified his system to achieve a non-concentric 2:1 system, the modified system does not correspond to the concentric non-2:1 system of the '015 patent.

(App. A. 14a) (emphasis added). Thus, the Federal Circuit concluded that Perkin-Elmer's Offner patent is not the equivalent of the non-concentric 2:1 system of the modified Reed system (App. A. 14a).

It is undisputed that Computervision's CA-3000 projection aligner also employs a non-concentric 2:1 system. The reasoning and holding of the Federal Circuit compels the conclusion that Computervision's non-concentric 2:1 system, like the modified Reed system, "does not correspond to the concentric non-2:1 system of the [Offner] patent." The Ninth Circuit, however, reached precisely the opposite conclusion. In reversing the jury verdict of non-infringement, that court compared Computervision's projection aligner with Perkin-Elmer's projection aligner (rather than with the claims of the patents in issue) and found the differences "miniscule" (App. C. 32a). The Ninth Circuit thus concluded that the non-concentric 2:1 system of the Computervision projection aligner corresponds to the concentric non-2:1 system of the Offner patent (App. C. 33a).

⁹ Perkin-Elmer has conceded that the "most significant difference between Offner and the backward Reed system is the teaching and claiming by Offner of the positioning of the mirrors in other than a 2 to 1, concentric relationship . . ." At the original trial, Perkin-Elmer's own expert, Dr. Hopkins, described the positioning of the mirrors as "the most critical factor" in the Offner patent.

Logic dictates that both findings cannot stand. If, as the Federal Circuit held, a non-concentric 2:1 system is not equivalent to the Perkin-Elmer concentric non-2:1 system, then Computervision did not infringe the Perkin-Elmer patents. If, on the other hand, the Ninth Circuit's decision that the two are equivalent is correct or is deemed to be controlling as the law of the case, then the Perkin-Elmer patents are not distinguishable from the prior art and are therefore invalid. The one result which is totally irreconcilable, if not incomprehensible, is the result presently confronting Computervision: that the Reed non-concentric 2:1 system is distinguishable from the Perkin-Elmer patents but that Computervision's non-concentric 2:1 system is not.

Because the Federal Circuit correctly concluded that the Offner patent claims are not directly infringed, it attempted to provide some reconcilable explanation for the Ninth Circuit's decision. Specifically, the Federal Circuit hypothesized that the Ninth Circuit may have been applying the doctrine of equivalents. The Federal Circuit itself has recognized, however, that the assessment of prior art for purposes of determining validity and for application of the doctrine of equivalents are related issues. Carman Industries, Inc. v. Wahl. 724 F.2d 932, 942 (Fed. Cir. 1983). In describing the manner in which the doctrine of equivalents is to be properly applied, the Carman court stated that:

Once it is determined that the doctrine of equivalents is applicable, a finding of infringement is not certain. The doctrine of equivalents is subject to two types of limitation which may prevent a finding of infringement: (1) estoppel based on the prosecution history of the patent ("file wrapper estoppel") and (2) invalidity of the claims according to the proposed construction in view of the prior art.

Id. (emphasis added) (specifically approving trial court's examination of "the proposed construction of the claims under the doctrine of equivalents").

The inconsistency between the opinions of the Ninth Circuit and the Federal Circuit demonstrates that the doctrine of equivalents cannot have been properly applied. If the Ninth Circuit in fact applied the doctrine to find infringement, it implicitly held the non-concentric 2:1 Computervision system to be the equivalent of the Offner patent claims. The modified Reed system, however, is a non-concentric 2:1 system; and the existence of this prior art mandates a finding of non-infringement. This, of course, is not the result reached by the Ninth Circuit. The Ninth Circuit's finding of infringement, therefore, is clearly inconsistent with the Federal Circuit's assumption that the Ninth Circuit properly applied the doctrine of equivalents.

The unique procedural posture of this case, described by the Federal Circuit as a "procedural morass," is largely attributable to the District Court's proper adherence to the doctrine enunciated by this Court in cases such as *Betts*, the Ninth Circuit's improper substitution of its own findings of fact on the issue of infringement for those previously made by the jury and the creation of the Federal Circuit Court of Appeals midway through the litigation. These factors have combined to subject Computervision to a series of inconsistent and ill-considered rulings. The manifest contradictions between the decisions of the two Circuit Courts of Appeals that have considered this case warrant the grant of *certiorari*.

Conclusion.

For the foregoing reasons, a writ of *certiorari* should issue to review the judgment and opinion of the United States Court of Appeals for the Federal Circuit.

Respectfully submitted,

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DATED, this 30th day of July, 1984.

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Appendix A.

United States Court of Appeals for the Federal Circuit

THE PERKIN-ELMER)	Appeal No. 83-1195
CORPORATION,)	
a corporation of New York,)	
Appellee,)	
v.)	
COMPUTERVISION)	
CORPORATION,)	
a corporation of Delaware,)	
Appellant.)	
DECIDED): April	6, 1984

Before MARKEY, Chief Judge, DAVIS, BALDWIN, KASHIWA, and BENNETT, Circuit Judges.

MARKEY, Chief Judge.

Appeal from a judgment of the District Court for the Northern District of California holding valid and infringed claims 1 through 5, 7 and 8 of U.S. Patent No. 3,748,015 ('015 patent), issued to Abe Offner, and claims 1 through 8 of U.S. Patent No. 3,821,763 ('763 patent), issued to Robert M. Scott. Both patents were assigned to The Perkin-Elmer Corporation (Perkin-Elmer). We affirm.

BACKGROUND

Perkin-Elmer's "Micralign" was the first commercially successful projection printer for use in manufacturing semiconductor integrated circuits. A projection printer uses optics to trace a circuit design onto a silicon wafer. Because a high degree of accuracy is demanded, the central component of a projection printer is its optical system. The optical structure in Perkin-Elmer's "Micralign" is disclosed in the '015 and '763 patents.

Computervision Corporation (Computervision) sells a projection printer known as the "Cobilt CA-3000" (CA-3000), which is similar to the Micralign.

A PROCEDURAL MORASS

In late 1977, Perkin-Elmer sued Computervision for infringement of the patents. Computervision counterclaimed for a declaratory judgment that the patents were invalid and not infringed.

Over Computervision's objection, Perkin-Elmer's demand for a jury trial was honored. The jury trial lasted nine days with each party introducing extensive testimony of numerous experts. Fourteen witnesses appeared before the jury and twelve depositions were read into the record. One hundred and forty documents and physical exhibits were introduced in evidence.

After receiving unchallenged instructions on the issues it was to decide, the jury deliberated and returned a general verdict that claims 1-8 of each patent were valid, not obtained by fraud, and not infringed. No special verdicts under Rule 49(a) and no interrogatories under Rule 49(b) had been sought. Computervision had not objected to the form of verdict submitted to the jury. The district court denied Perkin-Elmer's motions for a judgment of infringement notwithstanding the verdict ("JNOV") and for a new trial and entered a judgment of noninfringement. Perkin-Elmer's request for entry of judgment on the validity verdict was denied and, according to counsel for Computervision, Computervision accepted that denial. The refusal to enter judgment on the jury's validity verdict, the reasons for which are not known, served as a foundation of a procedural morass.

Perkin-Elmer appealed the non-infringement judgment, and the district court's refusal to enter a judgment of patent validity, to the Court of Appeals for the Ninth Circuit (Ninth Circuit). Though the judgment was entered only on the noninfringement verdict, and was viewed by the Ninth Circuit as not final, that court elected to entertain the appeal because "[t]he district court here obviously was not trying to avoid adjudication on the issue of patent validity". Perkin-Elmer Ccrp. v. Computervision Corp., 680 F.2d 669, 216 USPQ 760 (1982).

The Ninth Circuit held that Perkin-Elmer's motion for JNOV should have been granted, said nothing on the merits of the refusal to enter judgment on validity, and reversed and remanded the case for further proceedings. The Court denied a petition for rehearing and declined a suggestion for rehearing en banc.

The Ninth Circuit filed a two-page opinion, the portions relevant here consisting in their entirety of these four paragraphs:

Computervision's CA-3000 functions in a strikingly similar way [to the Micralign]. The Micralign and the CA-3000 are the only projection printers on the market in which the optics consist entirely of mirrors. Both axially space a small convex mirror behind a larger concave one. Both use a plate with an annular slit to restrict the light passing through the optical system and both have an identical light path from the circuit design to the wafer. The only difference is that the CA-3000 uses a less convex mirror and places the mirrors farther apart.

The differences between the Micralign and the CA-3000 are miniscule. The CA-3000 merely uses a less convex mirror and places it further from the concave mirror than the Micralign does. Otherwise, the two optical systems are identical.

Both rely on mirrors for their optics and employ one mirror placed behind another to reflect a circuit design onto a silicon wafer. A minor adjustment of the curvature and placement of one mirror does not place it beyond the reach of the patented procedure. Many variations are possible within the range of any patented procedure. Here, the degree of difference between the two systems created by the Cobilt's [CA-3000's] variation is minimal.

Therefore the CA-3000 does infringe Patent '015 and Patent '763 and Perkin-Elmer's motion for judgment notwithstanding the verdict should have been granted by the district court.

At a hearing on remand, Perkin-Elmer informed the district court of Sarkisian v. Winn-Proof Corp., 688 F.2d 647 (9th Cir. 1982), cert. den. 103 S.Ct. 1499 (1983), which had been decided a week before and which had articulated special guidelines for use in jury trials of patent suits. The district court deferred entering judgment pending consideration of Sarkisian, ordered briefs, and set for oral argument the matter of entering a judgment on the jury's verdict that the patents were valid.

At argument, the court stated that the findings of the jury supported a conclusion of non-obviousness, that there was considerable evidence supporting those findings, and that non-obviousness was clear as a matter of law. The court also noted that a patent is presumed valid, that the burden of persuasion remains with the party asserting invalidity, and that Computer-vision did not satisfy that burden. In accordance with the Ninth Circuit's mandate and in full compliance with Sarkisian, the district court determined that the patents were valid and infringed and granted Perkin-Elmer's motion for entry of judgment so stating.

The district court denied these Computervision motions: for JNOV on validity; for a new trial, based on an alleged denial of jury trial on a fact issue underlying the determination of nonobviousness; and to vacate the judgment, grant a new trial, and reopen discovery, all based on alleged fraudulent conduct of Perkin-Elmer during trial and appeal to the Ninth Circuit.

Computervision appeals the judgment, asserting error in denial of all its motions except that to reopen discovery. Further, Computervision seeks review and reversal of the Ninth Circuit's decision, accompanied by reinstatement of the original jury verdict of noninfringement.

ISSUES

- (1) Whether the district court erred in denying Computervision's motion for JNOV on validity.
- (2) Whether the district court abused its discretion in denying Computervision's motion for new trial based on absence of a jury trial of a fact issue underlying the determination of non-obviousness.
- (3) Whether the decision of the Ninth Circuit should be reviewed.
- (4) Whether the district court abused its discretion in denying Computervision's motions for new trial and to vacate the judgment based on allegations of fraudulent conduct.

OPINION

A. Denial of the Motion for JNOV on Validity

1. Standard of Review

When a party moves for JNOV, the trial court must consider all the evidence in a light most favorable to the non-mover, must draw reasonable inferences favorable to the non-mover, must not determine credibility of witnesses, and must not substitute its choice for that of the jury between conflicting elements in the evidence. Railroad Dynamics, Inc. v. A. Stucki Co., ____ F.2d ____, ____, 220 USPQ 929, 936 (Fed. Cir. 1984); Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 1546, 220 USPQ 193, 197 (Fed. Cir. 1983). Following those guidelines, the court determines whether the evidence so viewed constitutes "substantial evidence" in support of the jury's findings and, if so, whether those findings can support the legal conclusions necessarily drawn by the jury in accord with

its instructions enroute to its verdict. Railroad Dynamics, Inc., supra, ____ F.2d at ____, 220 USPQ at 936. "Substantial" evidence is such relevant evidence from the record taken as a whole as might be accepted by a reasonable mind as adequate to support the finding under review. Loyce E. Hayes v. Department of the Navy, No. 83-1210, sl. op. at 5 (Fed. Cir., February 9, 1984); SSIH Equipment S.A. v. USITC, 718 F.2d 365, 371 n.10, 218 USPQ 678, 684 n.10 (Fed. Cir. 1983). In sum, only when the court is convinced upon the record before the jury that reasonable persons could not have reached a verdict for the non-mover, should it grant the motion for JNOV. Railroad Dynamics, Inc., supra, ___ F.2d at ____, 220 USPQ at 936.

In its review, the district court must not lose sight of the presumption of validity. *Id.*, ____ F.2d at ____, 220 USPQ at 934-935. Where, as here, there is a verdict of validity, the question is not whether the patentee had introduced sufficiently substantial evidence to support the verdict, but whether the challenger's evidence so met the burden imposed by 35 U.S.C. § 282 ("[t]he burden of establishing invalidity of a patent or any claim shall rest on the party asserting such invalidity") that reasonable jurors could not have concluded that the challenger failed to overcome that burden. *Id*.

To facilitate review on a motion for JNOV and on appeal, it is preferred that a jury be provided with special interrogatories designed to reveal more clearly the findings it made. Absent such interrogatories, the law presumes the existence of findings necessary to support the verdict the jury reached. *Id.*, ______ F.2d at _____, 220 USPQ at 939. *Accord*, *Velo-Bind*, *Inc.* v. *Minn. Mining & Mfg. Co.*, 647 F.2d 965, 971, 211 USPQ 926, 932 (9th Cir. 1981); *Control Components*, *Inc.* v. *Valtek*, *Inc.*, 609 F.2d 763, 767, 204 USPQ 785, 788-89 (5th Cir.), cert. den. 449 U.S. 1022 (1980); *Tights*, *Inc.* v. *Acme-McCrary Corp.*, 541 F.2d 1047, 1061, 191 USPQ 305, 314

(4th Cir.), cert. den. 429 U.S. 980 (1976); White v. Mar-Bel, Inc., 509 F.2d 287, 290, 185 USPQ 129, 131 (5th Cir. 1975); Panther Pumps & Equipment Co., Inc. v. Hydrocraft, Inc., 468 F.2d 225, 228, 175 USPQ 577, 579 (7th Cir. 1972), cert. den. 411 U.S. 965 (1973). The particular findings the jury must make before it can reach a verdict are controlled by the court's instructions to the jury. Railroad Dynamics, Inc., supra, ____ F.2d at ____, 220 USPQ at 939.

On appeal from denial of a motion for JNOV, appellant must show that the jury's findings, presumed or express, are not supported by substantial evidence or, if they were, that the legal conclusion(s) implied from the jury's verdict cannot in law be supported by those findings. *Id.*, ____ F.2d at ____, 220 USPQ at 935-36.

Computervision refers repeatedly to the trial judge's statement of a personal view, made in the course of commenting on the Ninth Circuit's decision, that the claims at issue could not be both valid and infringed. We review judgments, however, not passing statements. Id., ___, F.2d at ___, 220 USPQ at 934; Stratofiex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 1540, 218 USPQ 871, 880 (Fed. Cir. 1983); In re Hyatt, 708 F.2d 712, 715, 218 USPQ 195, 198 (Fed. Cir. 1983). The district court made no finding that the claims were not infringed, or if they were, that they could not be valid. The appealed judgment states that the claims are valid and infringed. The trial judge had ample opportunity to grant Computervision's motion for JNOV, but did not. On the contrary, reflecting proper respect for the jury's function and the conclusion of the Ninth Circuit, the trial judge concluded that Computervision did not satisfy the JNOV requirements properly imposed by the law on one seeking to set aside a jury verdict.

2. Anticipation

The jury was instructed under 35 U.S.C. § 102² that there is no anticipation "unless all of the same elements are found in exactly the same situation and united in the same way . . . in a single prior art reference". See e.g., Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 771, 218 USPQ 781, 789 (Fed. Cir. 1983). From that instruction and the jury's verdict, the law presumes that the jury found no anticipation under § 102 because of difference (discussed infra) between the claimed inventions and the prior art. Having shown no basis for determining that the record is devoid of substantial evidence to support that finding, Computervision has not met its burden on appeal, i.e., to establish that a reasonable juror could not have found that Computervision failed to overcome the presumption of novelty included within the presumption of validity mandated by 35 U.S.C. § 282.

3. Obviousness

Determining obviousness/nonobviousness under 35 U.S.C. § 103³ involves factual inquiries into: (1) the scope and content

² Section 102 provides that a person is entitled to a patent unless one of a series of circumstances, described in subparagraphs (a)-(g) of that section, apply. Section 102(a) precludes a patent if "the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent".

³ Section 103 provides in relevant part:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness, e.g., long felt need, commercial success, failure of others, copying, unexpected results. See, e.g., Environmental Designs, Ltd v. Union Oil Co. of Calif., 713 F.2d 693, 695, 218 USPQ 865, 867 (Fed. Cir. 1983); Orthopedic Equipment Co. v. All Orthopedic Appliances, Inc., 707 F.2d 1376, 1379-82, 217 USPQ 1281, 1283-85 (Fed. Cir. 1983). The critical question, as § 103 makes plain, is whether the invention as a whole would have been obvious to one of ordinary skill in the art at the time it was made.

Included within the presumption of validity mandated by 35 U.S.C. § 282 is a presumption of nonobviousness which the patent challenger must overcome by proving facts with clear and convincing evidence. American Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350, 1358-59, 220 USPQ 763, 769-70 (Fed. Cir. 1984); Raytheon Co. v. Roper Corp., 724 F.2d 951, 960, 220 USPQ 592, 599 (Fed. Cir. 1983). The presumption remains intact even upon proof of prior art not cited by the Patent and Trademark Office (PTO), Raytheon, supra, 724 F.2d at 960, 220 USPQ at 599, though such art, if more relevant than that cited, may enable the challenger to sustain its burden. Id.

The obviousness/nonobviousness issue is a legal issue and may be submitted to the jury with proper instructions *Railroad Dynamics*, *Inc.*, *supra*, ____ F.2d at ___, 220 USPQ at 937; White v. Jeffrey Mining Co., 723 F.2d 1553, 1558, 220 USPQ 703, 705 (Fed. Cir. 1983); Connell, supra, 722 F.2d at 1547, 220 USPQ at 197.

The normal sequence of events following the jury's delivery of its verdict is: (1) automatic entry of judgment on the verdict promptly by the clerk in the absence of contrary instructions

from the court, Rule 58, Fed. R. Civ. P.;⁴ (2) within 10 days, the losing party, whose earlier motion for directed verdict had been denied, may file a motion for *judgment* notwithstanding the *verdict*. Rule 50(b), Fed. R. Civ. P.

In considering on remand Perkin-Elmer's motion for entry of judgment on the verdict of validity, the trial court had the then applicable language of the opinion in Sarkisian v. Winn-Proof Corp., supra, called to its attention. The court did not, however, appear to interpret the indication in that opinion that it should determine nonobviousness "independently" of the jury's verdict as requiring it to totally ignore the rules applicable to jury trials in non-patent cases, or to proceed as though the jury had never been impanelled, had never been instructed on the issue, had never considered the issue, and had never rendered a verdict based on its conclusion. On the contrary, in concluding, as did the jury, that the inventions would have been nonobvious, the court proceeded in a manner similar to that involved in deciding a motion JNOV and used the jury's presumed findings supported by substantial evidence. The court's use of the jury's findings in this case indicates that it was in fact answering the appropriate question: can the jury's presumed findings support conclusion of nonobviousness encompassed in the jury's verdict of validity? The trial court

⁴The record does not indicate whether such instructions were issued. The trial court's denial of Perkin-Elmer's request for entry of judgment on the jury's validity verdict may have been interpreted by the clerk as the equivalent of such instructions. Perkin-Elmer apparently did not seek a writ of mandamus but included the denial of its request as an element of its appeal.

⁵ The view suggested in *Sarkisian*, that a jury verdict on nonobviousness is at best advisory, would make charades of motions for directed verdict or JNOV under Fed. R. Civ. P. 50 in patent cases. Those motions apply only to *binding jury verdicts*. See 9 Wright and Miller, Federal Practice and Procedure § 2523 (1982).

Moreover, use of an advisory jury is limited to actions not triable of right by a jury, Rule 39(c), Fed. R. Civ. P., and Rule 52(a), Fed. R. Civ. P.,

effectively answered the same question in then denying Computervision's motion for JNOV.

The record contains strong objective evidence — which Computervision does not contest — in support of the nonobviousness conclusion. It was stipulated that the Micralign projection printer, having as its critical element the optical system of the '015 and '763 patents, was an outstanding commercial success and was the first commercially successful projection printer for use in the manufacture of semiconductor integrated circuits. Testimony unchallenged on appeal established that the Micralign had numerous advantages over previous printers, became the industry standard, revolutionized the industry, and satisfied a long felt need; unchallenged testimony also showed surprise at the exceptional results achieved by the invention claimed in the '015 patent, and the radical departure from traditional approaches to lens design represented by the invention claimed in the '763 patent.

Such objective evidence can constitute "highly probative, objective criteria fully capable of serving as a foundation for the legal conclusion of unobviousness". Raytheon Co. v. Roper Corp., supra, 724 F.2d at 961, 220 USPQ at 600. That objective evidence, and the inadequacies of the prior art summarized below, constitute a formidable obstacle to Computervision's burden of establishing on appeal that reasonable jurors could not have concluded that it failed to meet its statutory burden under § 282. Computervision did not overcome that obstacle.

requires the court to enter its own set of findings and conclusions just as it must do when sitting without a jury. That requirement, and the reluctance to take days or weeks of jurypersons' lives for service as mere advisors, appear to account for the virtually universal non-use of advisory juries.

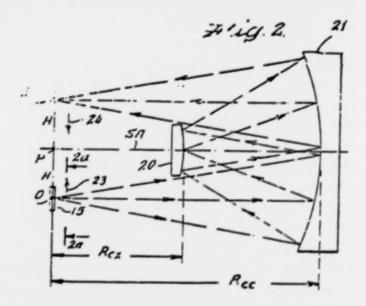
Moreover, the notion that patent cases are somehow outside the mainstream of the law, and that special, judge-designed rules not applicable to other types of jury trials must be applied when a "patent case" is tried before a jury, finds no support in the statute, in the Federal Rules of Civil Procedure, or in the Seventh Amendment to the Constitution.

The ensuing discussion of the prior art illustrates the presence of substantial evidence supporting the facts presumably found by the jury.

(a) Differences Between the Invention Claimed in the '015 Patent and the Prior Art

(1) The '015 Patent

The invention claimed in the '015 patent is illustrated in Figure 2:



Two concentric spherical mirrors, one concave (21) and the other convex (20), have their centers of curvature at point P on reference axis SA. There are three reflections in the system: the light from the object plane (O) is reflected off mirror 21 to mirror 20, off mirror 20 to a second portion of mirror 21, and off that mirror portion to the image plane (I). Mirror 20 has a radius of curvature (Rcx) greater than one half that of mirror 21 (Rcc) by a slight amount, referred to by Perkin-Elmer as \triangle . The system creates a stigmatic image, defined in testi-

mony as pointlike imagery, where all the rays from a point on an object come to a point on an image without aberrations. The '015 patent describes the invention as a system in which "the image is formed in accurate micro detail with high resolution".

Claim 1 is illustrative:

1. A unity magnification catoptric [i.e., using only mirrors] image-forming system comprising at least one concave mirror and at least one convex mirror, said mirrors being supported with their centers of curvature substantially coincident, and means to define a location for an object the image of which after at least three reflections including at least one reflection at each of said mirrors is a real image at a second location, the sum of the powers of said convex mirrors multiplied by the numbers of reflections thereat respectively being sufficiently less than the sum of the powers of said concave mirrors multiplied by the numbers of reflections thereat respectively to produce at said second location a stigmatic image of an object in said first location.

The system of claim 1 is one of unity magnification and is image forming. Those limitations appear in the preamble, but are necessary to give meaning to the claim and properly define the invention. See In re Bulloch, 604 F.2d 1362, 1365, 203 USPQ 171, 174 (CCPA 1979); Kropa v. Robie, 187 F.2d 150, 151-52, 88 USPQ 478, 480-81 (CCPA 1951).

The "sum of the powers" language of claim 1, also present in claims 2-4, is equivalent to the language in claims 5 and 7-8 that $Rcx = Rcc/2 + \triangle$. Because the claims have generally been argued together, the validity of all the claims stands or falls with claim 1. See, e.g., Raytheon Co. v. Roper Corp., 724 F.2d 951, 960, 220 USPQ 592, 599 (Fed. Cir. 1983).

(2) Differences From the Prior Art

The Reed patent (3,190,171), considered by the PTO, discloses a viewing system simulating the appearance of an aircraft carrier as the pilot approaches for a landing. The system employs concentric convex and concave mirrors with a radii ratio of 2:1. The image system of the carrier is not of unity magnification and is a viewing, not an image forming, system; the carrier image is a virtual, relatively poor image, whereas claim 1 requires formation of a real, stigmatic image; it involves a 2:1 mirror system, whereas claim 1 involves a non 2:1 system. Though Reed said he modified his system to achieve a non-concentric 2:1 system, the modified system does not correspond to the concentric non-2:1 system of the '015 patent.

Computervision urges that the Reed disclosure be viewed backwards, i.e., as a system for forming an image of the pilot's eye. There is no evidence that those of ordinary skill in the art would so view it, and such distortion of a reference in light of a patentee's disclosure is pure hindsight.

Cited in Computervision's brief (though not in its closing argument to the jury) is the Schmidt telescope, used principally since 1930 in astronomy. Unlike the claimed invention, the Schmidt system is not a catoptric, *i.e.*, all mirror, system, has chromatic aberration, does not produce a stigmatic image, and has no convex mirror.

There was testimony about modifying the Schmidt telescope by replacing a photographic plate therein with a convex mirror. Assuming, arguendo, the propriety of such testimony, the modification is not catoptric (all mirrors), does not produce unity magnification, lacks "means for defining the location of an object", and does not produce the stigmatic image of the claimed invention.

^{*}There are other differences in the other claims. For example, claim 7 requires that the "means to define a location for an object" include "an arcuate slit of radius substantially equal to the distance of said object location from said center of curvature".

(b) Differences Between the Invention Claimed in the '763 Patent and the Prior Art

(1) The '763 Patent

The '763 invention is illustrated in Figs. 1 and 2:

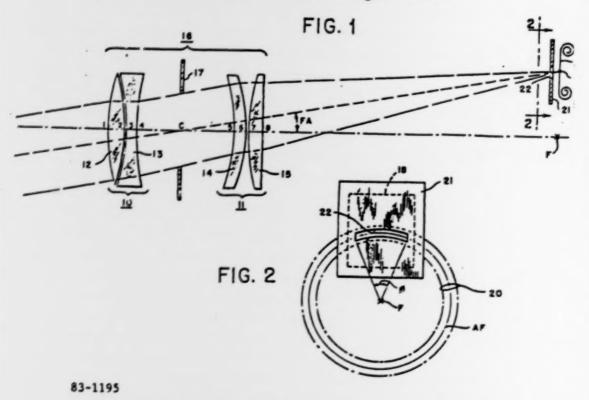


Figure 1 depicts two groups, 10 and 11, of lens elements together forming a lens 16 having optical center C. The invention is not limited to "lens only" (dioptric) systems; the image forming elements can be catoptric (all mirrors) or catadioptric (lenses and mirrors). The lens elements are rotationally symmetric about a common optical axis OA. The system also includes a mask 21 having a slit 22 positioned adjacent a conjugate focal plane of the lens 16 for the object field being magnified, and an image receiving surface, such as film 18,

disposed behind the slit in a focal plane of the lens 16 for the object field of interest. The elements of the system are fixed with respect to each other, except that film 18 may be advanced in its own plane relative to the mask as the system is moved with respect to the object field. The system is intended to image a distant object field at infinity on the left. The slit 22 is of such curvature and radial extent, and is so spaced from the axis OA, as to lie adjacent a part of an annular zone 20 of the second principal focal plane of lens 16 in which case the lens will focus bundles of collimated light from the left and will have a selected range of values for the angle of inclination FA of those bundles to the system axis.

Claims 1-8 of the '763 patent include six structural and two method claims. Claims 1 and 7 are illustrative:

- 1. Image-forming apparatus comprising image-forming optical elements arranged in an imaging system that is rotationally symmetric about an axis, said system being optically corrected to produce stigmatic imagery in an annular zone centered on said axis with all points in said zone possessing field angles other than zero, at least one imaging surface conforming substantially to at least part of said zone, aperture limiting means defining at a conjugate focal surface of said system an area whose points possess field angles corresponding to the field angles of points in said zone, said aperture limiting means being positioned to define an object field area imaged on said imaging surface, and means to scan said object field area with respect to said system.
- 7. The method of recording an image of an extended object which comprises the steps of

⁷Annular field systems need not work only at infinity. They can work at finite conjugates, in which case the mask having a slit therein may be placed near the object or near the image, or one may be disposed near each.

- a. providing an image-forming system that is rotationally symmetric about an axis and optically corrected to produce stigmatic imagery in an annular zone centered on said axis with all points in said zone possessing field angles other than zero,
 - b. scanning an object field past said system, and
- c. recording through time that portion of the image of said object field that produced by said system at a segment of said annular zone.

Because the claims have generally been argued together, the validity of all the claims stands or falls with claims 1 and 7.

(2) Differences From the Prior Art

Computervision summarily asserts in its brief, without explanation, that the Reed and Schmidt disclosures are applicable. That bare assertion cannot possibly satisfy Computervision's appellate burden of showing that no reasonable juror could have concluded that it had failed to prove facts rendering the '763 patent claims invalid.

The Sonne and Goddard patents are put forward. Sonne, described in the '763 patent, discloses a stereoscopic camera for aerial photography. Goddard discloses essentially the same aerial camera system, except that Goddard's film has layers photosensitive to different colors. Computervision has not demonstrated that no reasonable juror could have found that Sonne or Goddard fail to disclose, for example, these limitations of claims 1 and 7: that the system be "optically corrected to produce stigmatic imagery"; and that such imagery be "in an annular zone centered on said axis, with all points in said zone possessing field angles other than zero".

Citing the sparse testimony of a Perkin-Elmer expert describing a Cook-Triplet lens as "any lens combination which has two positive lenses, separated with a negative lens between them", Computervision's brief contains no articulation and no citation to the record to indicate what was presented to the jury concerning the claim elements and whatever the Cook-Triplet lens is alleged to have taught. The Appendix contains no description or drawing of a Cook-Triplet lens. In sum, Computervision's burden of showing error by the trial court in denying its motion for JNOV is not assisted by its reference to testimony about the Cook-Triplet lens.

CONCLUSION ON VALIDITY

Nothing in the prior art anticipates or, considered singularly or as a whole, would have suggested, the inventions claimed in the '015 and '763 patents. The objective evidence is strong in support of the judge's ruling upholding the jury's verdict on validity. Thus, the district court did not err in denying Computervision's motion for JNOV.

B. Loss Of Right To Jury Trial

Though it had opposed Perkin-Elmer's demand for a jury trial, Computervision argued it was deprived of a jury determination of the differences between the claimed inventions and the prior art and, based on that argument, moved for a new trial.8 In reviewing a denial of a motion for new trial, the abuse

⁸ Because we dispose of the issue on other grounds, we need not decide whether Computervision's opposition to jury trial amounted to a waiver under Federal Rule 38. See e.g., Reid Bros. Logging Co. v. Ketchikan Pulp Co., 699 F.2d 1292 (9th Cir. 1983).

of discretion standard applies. See e.g., Railroad Dynamics, Inc., supra, ____ F.2d at ____, 220 USPQ at 937. No such abuse occurred here.

Computervision says this is the first case in which a jury verdict of noninfringement was reversed without consideration of a validity verdict, resulting in unfairness. Perkin-Elmer cites numerous non-jury cases in which a court of appeals has reversed a court finding of noninfringement and remanded for entry of judgment without reconsideration of validity. It is unnecessary, however, to decide such questions. There has been a judgment of validity and infringement and it is that judgment that has been appealed to this court.

The plight alleged by Computervision results from the procedural morass described above. Had judgment been initially entered on validity and infringement, the Ninth Circuit could have considered both issues, rendering this appeal unnecessary. Yet, Computervision did not object to the district court's action, but "accepted" its refusal to enter judgment on validity.

The district court's refusal to enter judgment on validity may have been ill advised; it cannot now serve as reversible error on this appeal. The thrust of Computervision's argument here is that the Ninth Circuit's interpretation of the claims necessarily differed from that of the jury. Hence, says Computervision, the jury never determined the differences between the prior art and the claims as interpreted by the Ninth Circuit. The argument depends critically on facts merely presumed and not established, *i.e.*, that the Ninth Circuit interpreted the claims and that its interpretation differed from that reached by the jury in following the trial judge's unchallenged instructions.

The Ninth Circuit looked at the devices and concluded that the "miniscule" difference between the Micralign and CA-3000 printers was insufficient to constitute substantial evidence in support of the jury's non-infringement verdict. 680 F.2d at 671, 216 USPQ at 761-62. That conclusion did not necessarily

depend on a claim interpretation different from that in accord with which the jury was instructed. It, as the language of the Ninth Circuit opinion makes plain, rested on a different assessment of the CA-3000 printer and its equivalency to the claimed inventions:

Both rely on mirrors for their optics and employ one mirror placed behind another to reflect a circuit design onto a silicon wafer. A minor adjustment of the curvature and placement of one mirror does not place it beyond the reach of the patented procedure. Many variations are possible within the range of any patented procedure. Here, the degree of difference between the two systems created by the Cobilt's variation is minimal [CA-3000].

Id.

Though the Ninth Circuit's opinion did not use the word "equivalence", that court was presumably aware that the jury had been instructed on the doctrine and its opinion spoke the language of equivalency ("functions in a strikingly similar way"; "the only difference"; "differences . . . are miniscule"; "Otherwise . . . identical"; "A minor adjustment . . . not . . . beyond the reach"; "variations . . . within the range"). Assessing equivalency involves a determination of whether the claimed invention and alleged infringing device, which are different (there would otherwise be literal infringement), perform substantially the same function in substantially the same way to give the same or substantially the same result. See Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 608 (1950). If equivalence appears, infringement will be found unless (1) arguments or amendments made by applicant during prosecution (prosecution history estoppel) estop the patentee from asserting a range of equivalence broad enough to encompass the accused product or process; or (2) the equivalent device is within the public domain, i.e., found in the prior art, Carmen Industries, Inc. v. Wahl, 724 F.2d 932, 942, 220 USPQ 481, 489 (Fed. Cir. 1983); Thomas & Betts Corp. v. Litton Systems, Inc., 720 F.2d 1572, 1579-80, 220 USPQ 1, 6-7 (Fed. Cir. 1983). Determining the existence of either condition (1) or condition (2) does not require reassessment of validity. See e.g., Carmen Industries, supra, 724 F.2d at 936 n.2, 937 n.5, 220 USPQ at 484 n.2, 485 n.5. Nor does determination of the existence of either condition necessitate a re-interpretation of the claims as written. Computervision's assumptions concerning a Ninth Circuit interpretation of the claims are unsupported in the record.

C. The Ninth Circuit Decision

The decision of the Ninth Circuit is entitled to great deference under the law of the case doctrine. See Central Soya Co. v. Geo. A. Hormel & Co., 723 F.2d 1573, 1580, 220 USPQ 490, 495 (Fed. Cir. 1983). That doctrine ensures judicial efficiency and prevents endless litigation. Id. Its elementary logic is matched by elementary fairness — a litigant given one good bite at the apple should not have a second.

Here, Computervision has had an eminently fair chance to litigate the infringement issue. The issue was presented to the jury, to the trial judge on Perkin-Elmer's motion, and to the Ninth Circuit on direct appeal, on petition for rehearing, and in a suggestion for rehearing in banc. Computervision prevailed in the first two instances and lost in the last three. In those circumstances, there is no basis to relitigate infringement.

We recognize that a court that established the law of a case could elect to review its earlier decision and change it if one of the three "exceptional circumstances" exist: (1) the evidence on subsequent trial was substantially different; (2) controlling authority has intervened; or (3) the earlier decision was clearly

erroneous and would work a manifest injustice. Central Soya, supra, 723 F.2d at 1580, 220 USPQ at 495. Revisions in the law of the case occur "very infrequently" when an appellate court is asked to review the decision of a coordinate court. 1B Moore's Federal Practice ¶ 0.404 [4.-5 at 138].

Arguing the "clearly erroneous/manifest injustice" exception, described by our predecessor court as "stringent", and as requiring a "strong showing of clear error", Short v. United States, 661 F.2d 150, 154 (Ct.Cl. 1981), Computervision would have us review the Ninth Circuit decision on its merits. The decision to review is a threshold consideration, for only on full review can a court determine whether the decision reviewed was clearly erroneous and produced a manifest injustice. To obtain review, an appellant must make at least a prima facie showing of error sufficient to indicate the advisability of review. A mere suspicion of error will not suffice; we must be "convinced to a certainty" that error warranting review exists. Id. Computervision has made no such convincing showing.

Computervision says the Ninth Circuit did not consider the claim language and the prior art. However, the Ninth Circuit had before it the claims, the prior art, and the parties' briefs and arguments. That the court did not specifically mention the claims and prior art in its opinion forms no basis for an assumption that it did not consider those elements in determining that the CA-3000 printer was an equivalent. That a court "do[es] not discuss certain propositions do[es] not make the decision inadequate or suggest the . . . court failed to understand them". Bracey v. United States, 142 F.2d 82, 84, 61 USPQ 73, 75 (D.C. Cir. 1944). Moreover, "[w]e should never assume that a court of concurrent jurisdiction neglected to perform its duty". Skil Corp. v. Millers Falls Co., 514 F.2d 554, 557, 191 USPQ 548, 550 (6th Cir.), cert. den. 429 U.S. 1029 (1976).

In an effort to show that the Ninth Circuit did not understand the technology, Computervision says one of the two differences the court found (wider placement of the convex and concave mirrors) does not exist because the mirrors are spaced the same in both systems. That error, however, would, if anything, have favored Computervision because it would have increased the court's perceived differences from one to two. Computervision has not made a prima facie showing that the finding of an allegedly non-existent difference constituted clear error producing manifest injustice.

D. Alleged Fraudulent Conduct

The motion for a new trial or to vacate the judgment under Rule 60(b) alleged fraudulent conduct. On review of a denial of a motion to vacate under Rule 60(b), the standard, like that on review of a denial of a motion for new trial, is whether an abuse of discretion occurred. See e.g., CTS Corp. v. Piher Int'l Corp., No. 83-1119, sl. op. at 10 (Fed. Cir., February 17, 1984). None did.

The allegation of fraudulent conduct rests on a statement made after trial in this action by counsel for a defendant (Canon) in a separate case filed by Perkin-Elmer. At a combined hearing in connection with this action and that case, counsel for Canon said that before trial in this action Perkin-Elmer changed its Micralign printer from the concentric non-2:1 system of the '015 patent claims to the nonconcentric 2:1 system of the CA-3000 printer to get an improved result. Computervision says Perkin-Elmer witnesses "fraudulently" testified that the printer claimed in the '015 patent and the CA-3000 printer achieve "substantially the same" result and thereby rendered the patents in suit unenforceable. We disagree.

Assuming that a statement of counsel for a defendant in another case can be viewed as testimony or as evidence, exact identity of results is not required in establishing equivalency. Though *Graver Tank*, *supra*, alternatively speaks of the "same"

and "substantially the same" result, 339 U.S. at 608, the doctrine is clearly based on substantial, not exact, identity:

Equivalence, in the patent law, is not the prisoner of a formula and is not an absolute to be considered in a vacuum. It does not require complete identity for every purpose and in every respect.

Id. at 609. Similarly, though the doctrine was initially articulated in Hughes Aircraft Co. v. United States, 717 F.2d 1351, 1361, 219 USPQ 473, 480 (Fed. Cir. 1983) as appearing to involve the "same" result, when the court applied the doctrine it referred to "substantially the same" result. 717 F.2d at 1366, 219 USPQ at 484. Moreover, our predecessor court has recognized that the results achieved may be "substantially" the same. See e.g., Lockheed Aircraft Corp. v. United States, 553 F.2d 69, 79, 193 USPQ 449, 461 (Ct.Cl. 1977); Pratt & Whitney Co. v. United States, 345 F.2d 838, 841, 145 USPQ 429, 431 (Ct.Cl. 1965).9

Thus, if Perkin-Elmer changed its commercial device to get an improved result by making it the same as the CA-3000, it would not be inconsistent — much less fraudulent — for Perkin-Elmer witnesses to testify that the claimed and accused devices are nevertheless equivalent. A patentee need produce no commercial device. Infringement is determined by comparison with the patentee's claimed invention, not with its marketed product. CTS Corp. v. Piher Int'l Corp., 527 F.2d 95, 100, 188 USPQ 419, 423 (7th Cir. 1975), cert. den. 424 U.S. 978 (1976).

⁹Though some opinions of this court contain references to the "same" result, the court was not required to make a "same" — "substantially the same" distinction in the cases before it. See e.g., Carmen Industries, Inc. v. Wahl, supra; Thomas & Betts Corp. v. Litton Systems, Inc., supra.

Presumably, as above indicated, the Ninth Circuit so determined equivalence, and, though it did not in its opinion employ the words of *Graver Tank*, *supra*, its words do indicate that it found "substantially the same" result. Perkin-Elmer's witnesses testified that the results are substantially the same, not identical. The instructions to the jury defined equivalency in terms of "substantially the same" result. Computervision's own expert testified that the CA-3000 optical system performs the same work in substantially the same way as the '015 patent system, and accomplished a similar result. For all of those reasons, Computervision's assertion of fraudulent conduct is unpersuasive.

The district court committed no abuse of discretion in denying Computervision's alternative motions for new trial or to vacate the judgment under Rule 60(b).

Decision

The denial of Computervision's motion for JNOV having been correct, the denial of its motions for new trial and to vacate the judgment having represented no abuse of discretion, the decision of the Ninth Circuit having established the law of the case, and no legal error having been shown, the judgment of validity and infringement of claims 1-5, 7 and 8 of the '015 patent and claims 1-8 of the '763 patent must be affirmed.

AFFIRMED

United States Court of Appeals for the Federal Circuit

THE PERKIN-ELMER)	Appeal	No.	83-1195
CORPORATION,)			
a corporation of New York,)			
Appellee,)			
٧.)			
COMPUTERVISION)			
CORPORATION,)			
a corporation of Delaware,)			
Appellant.)			

DAVIS, Circuit Judge, dissenting.

I am concerned that the District Court denied the appellant's motion for new trial on validity simply because the judge felt compelled to do so by the Ninth Circuit's ruling on infringement, despite the District Court's strongly expressed views (in argument) that (a) the Ninth Circuit's interpretation of the patent (in the infringement appeal), without any necessary jury findings supporting that position, was "absurd", "not according to me", "not according to the jury", a position "with which I strongly take issue", (b) that the patents could not both be valid and infringed, but (c) that the District Court felt bound to uphold validity by the Ninth Circuit's infringement decision because that appellate court interpreted the patents broadly as a

^{&#}x27;The District Court somewhat earlier said: "I am rather concerned as to whether or not in the light of that most unusual act of [the Ninth Circuit], where [they] really made a finding of fact there, whether the defendant doesn't deserve a new trial on the issue that's brought back here."

The Ninth Circuit's interpretation was that the appellant's system and the appellee's claims were practically identical, with "miniscule" differences.

"conclusion of law", though the District Court clearly considered that that interpretation, if proper, would necessarily depend on findings of fact to be made by the jury but not actually made in this case.

Because the District Court indisputably believed that the original jury had not interpreted the patent, on the basis of the court's instructions, in the way the Ninth Circuit had done, and because, if one accepts the Ninth Circuit's interpretation, appellant was entitled to a new trial so that the "obviousness" findings required by Graham v. John Deere Co., 383 U.S. 1 (1966), should be made by a jury with respect to the Ninth Circuit's interpretation of the claims, a new trial should have been granted. It was not granted solely because the District Court erroneously felt bound with respect to validity by the Ninth Circuit's infringement decision.2 That was an abuse of discretion, calling for reversal of the refusal to grant the new trial requested by appellant and a remand for a new trial on validity only.3 "Rule 59 [New Trials] gives the trial judge ample power to prevent what he considers to be a miscarriage of justice. It is his right, and indeed his duty, to order a new trial if he deems it in the interest of justice to do so." (emphasis added) 11 Wright & Miller, Federal Practice and Procedure, Civil § 2803, pp. 31-2 (1973). When, as here, the trial judge refuses to grant a motion for a new trial which he plainly should have granted, an abuse of discretion has occurred. Ruiz v. Hamburg-American Line, 478 F.2d 29, 34 (9th Cir. 1973).

³ It is undisputed that the Ninth Circuit did not consider validity at all.

^{&#}x27;I agree with the majority that this court should not reconsider the Ninth Cir-'cuit's determination of infringement.

Appendix B.

In the United States District Court for the Northern District of California

THE PERKIN-ELMER)	Civil Action No.
CORPORATION,)	C-77-2642-WHO
a corporation of New York,)	
Plaintiff,)	
vs)	JUDGMENT
COMPUTERVISION)	
CORPORATION,)	
a corporation of Delaware,)	
Defendant.)	
COMPUTERVISION)	
CORPORATION,)	
a corporation of Delaware,)	
Counterclaimant,)	
VS)	
THE PERKIN-ELMER)	
CORPORATION,)	
a corporation of New York,)	
Counterdefendant.)	

This action came on for trial before the Court and a jury, and the issues having been duly tried and the jury having duly rendered its verdict on the issue of validity, and the Court having considered that verdict and the evidence supporting it and finding it to be correct as a matter of law and adopting it as its own, and having considered the opinion and mandate of the United States Court of Appeals for the Ninth Circuit, it is hereby ordered, adjudged and decreed as follows:

- 1. That United States Letters Patent No. 3,748,015 issued to plaintiff as assignee of Abe Offner, and each of claims 1 through 8 thereof, is good and valid at law.
- 2. That United States Letters Patent No. 3,821,763 issued to plaintiff as assignee of Roderick M. Scott and each and every claim thereof, is good and valid at law.
- 3. That the Cobilt CA-3000 Mask Aligner heretofore manufactured, used and sold by the defendant constitutes an infringement of claims 1 through 5, 7 and 8 of Patent No. 3,748,015 and claims 1 through 8 of Patent No. 8,821,763.
- 4. That plaintiff is entitled to recover from defendant the damages which it has sustained by reason of defendant's infringement. The determination of the amount to be awarded as damages are reserved for later disposition.
- 5. That a permanent injunction issue restraining defendant, its officers, agents, servants, and employees, and those persons in active concert or participation with it, from directly or indirectly infringing claims 1 through 5, 7 or 8 of Patent No. 3,748,015 or claims 1 through 8 of Patent No. 3,821,763 by making, using or selling, or causing to be made, used or sold Cobilt CA-3000 Mask Aligners, and any infringing equivalents thereof.
- That plaintiff recover from the defendant the costs of this action.

This judgment is final except for the accounting.

Dated:	May	18,	1983					
				United	States	District	Judge	

Appendix C.

The PERKIN-ELMER CORPORATION, a New York corporation, Appellant,

V.

COMPUTERVISION CORPORATION, a Delaware corporation, Appellee.

No. 80-4087.

United States Court of Appeals, Ninth Circuit.

Argued and Submitted Aug. 13, 1981. Decided July 2, 1982.

Rehearing and Rehearing En Banc Denied Aug. 17, 1982.

Before SKELTON,* Court of Claims Judge, and GOOD-WIN and NORRIS, Circuit Judges.

GOODWIN, Circuit Judge.

Perkin-Elmer appeals from a judgment upon a jury verdict finding its patents valid but not infringed.

Perkin-Elmer and Computervision sell projection printers, the Micralign and the Cobilt CA-3000, respectively, to the semi-conductor industry for use in the manufacture of integrated circuits. A projection printer uses optics to illuminate a circuit design and trace this design on a silicon wafer. A perfect degree of accuracy is demanded. Thus, the central component of a projection printer is its optical system. The optical structure comprising Perkin-Elmer's Micralign printer is formed by Perkin-Elmer's Offer Patent No. 3,748,015 ('015) and Scott Patent No. 3,821,763 ('763).

^{*}The Honorable Byron G. Skelton, Senior Judge, United States Court of Claims, sitting by designation.

Both patents possess two physical parts: a large concave spherical mirror and a smaller convex spherical mirror axially spaced behind it. Light that has been shown across the circuit's design is reflected off the concave mirror to the convex one and then to the image location on the silicon wafer. This procedure results in a near perfect reproduction of the circuit design on the wafer.

Computervision's CA-3000 functions in a strikingly similar way. The Micralign and the CA-3000 are the only projection printers on the market in which the optics consist entirely of mirrors. Both axially space a small convex mirror behind a larger concave one. Both use a plate with an annular slit to restrict the light passing through the optical system and both have an identical light path from the circuit design to the wafer. The only difference is that the CA-3000 uses a less convex mirror and places the mirrors farther apart.

The similarities of the CA-3000 to the Micralign printer in time led Perkin-Elmer to sue Computervision for infringement of its optical patents. Computervision counterclaimed contending that Perkin-Elmer's patents were invalid. The case was tried to a jury which returned a verdict finding Perkin-Elmer's patents valid but not infringed. The district court failed to include in the judgment a reference to patent validity. The judgment refers only to the issue of infringement. Perkin-Elmer appeals from the judgment of no infringement. Computervision could not appeal from the verdict of patent validity because it did not result in a judgment.

A. Lack of Final Judgment

[1] Ordinarily a judgment on fewer than all the claims in an action does not terminate that action and, thus, is not appeal-

Perkin-Elmer's notice of appeal also stated that it was appealing the refusal of the district court to enter a judgment of patent validity. This matter can be resolved on remand.

able. Lockwood v. Wolf Corp., 629 F.2d 603, 608 (9th Cir. 1980). An exception exists where "the district court obviously was not trying to adjudicate fewer than all the pleaded claims." Id. at 608. See also Wescott v. Impresas Armadoras S. A. Panama, 564 F.2d 875, 880-81 (9th Cir. 1977).

[2] The district court here obviously was not trying to avoid adjudication on the issue of patent validity. Thus, all the claims were tried and adjudicated. This court has jurisdiction of the appeal brought by Perkin-Elmer.

B. Infringement

1. Standard

- [3] Infringement is usually a matter of fact. Stilz v. United States, 269 U.S. 114, 147, 46 S.Ct. 37, 38, 70 L.Ed. 202 (1925); Reinharts, Inc. v. Caterpillar Tractor Co., 85 F.2d 628, 630 (9th Cir. 1936), cert. denied, 302 U.S. 694, 58 S.Ct. 13, 82 L.Ed. 536 (1937). Where, however, the facts are not in dispute, infringement becomes a matter of law. United States v. Esnault-Pelterie, 303 U.S. 26, 30, 58 S.Ct. 412, 414, 82 L.Ed. 625 (1937); Sanitary Refrigerator Co. v. Winters, 280 U.S. 30, 36, 50 S.Ct. 9, 11, 74 L.Ed. 147 (1929).
- [4] In this case, the only facts in dispute related to the issue of prior art and whether this art invalidated Perkin-Elmer's patents. The jury decided this factual issue in favor of Perkin-Elmer when it declared Perkin-Elmer's patents valid. The validity of the patents is presumed for the purposes of this appeal. No factual issues remain. The question of infringement becomes one of law. Accordingly, the error-of-law standard of review applies.

2. Application

[5] The differences between the Micralign and the CA-3000 are miniscule. The CA-3000 merely uses a less convex mirror

and places it further from the concave mirror than the Micralign does. Otherwise, the two optical systems are identical.

Both rely on mirrors for their optics and employ one mirror placed behind another to reflect a circuit design onto a silicon wafer. A minor adjustment of the curvature and placement of one mirror does not place it beyond the reach of the patented procedure. Many variations are possible within the range of any patented procedure. Here, the degree of difference between the two systems created by the Cobilt's variation is minimal.

Therefore the CA-3000 does infringe Patent '015 and Patent '763 and Perkin-Elmer's motion for judgment notwithstanding the verdict should have been granted by the district court.

Reversed and remanded.

Appendix D.

United States District Court Northern District of California

THE PERKIN-ELMER CORPORATION, a corporation of New York, Plaintiff,)	No. C-77-2642 WHO
vs.)	JUDGMENT
COMPUTERVISION)	
CORPORATION,)	
a corporation of Delaware,)	
Defendant.)	
COMPUTERVISION)	
CORPORATION,)	
a corporation of Delaware,)	
Counterclaimant,)	
vs.)	
THE PERKIN-ELMER)	
CORPORATION,)	
a corporation of New York,)	
Counterdefendant.)	

This action having come on for trial before the Court and a jury, the Honorable William H. Orrick, Jr., presiding, and the issues having been duly tried and the jury having rendered its verdict,

IT IS HEREBY ORDERED AND ADJUDGED:

- 1. That claims 1 to 8 of each of United States Patents No. 3,748,015 and 3,821,763 are not infringed by the Cobilt CA-3000 projection printer manufactured and sold by defendant prior to the date of this judgment.
- 2. That the plaintiff take nothing by its complaint and that the action be dismissed on the merits.
- 3. That defendant's second counterclaim for infringement of United States Patent No. 3,884,573 be dismissed with prejudice.
- 4. That defendant's third counterclaim for anti-trust violations be dismissed with prejudice.
 - 5. That each party bear its own costs of this aciton.

Dated: January 21, 1980.

William H. Orrick, Jr. United States District Judge

Office-Supreme Court, U.S. FILED

SEP 1 1984

ALEXANDER L. STEVAS,

In the Supreme Court

OF THE

United States

OCTOBER TERM, 1984.

Computervision Corporation, Petitioner.

v.

THE PERKIN-ELMER CORPORATION, Respondent.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Federal Circuit.

OPPOSITION TO PETITION FOR A WRIT OF CERTIORARI

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LISTING OF RELATED CORPORATIONS

There are no parent companies, subsidiary companies (other than wholly owned subsidiaries) or affiliate companies of the Respondent THE PERKIN-ELMER CORPO-RATION.



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No. 84-173

In the Supreme Court

OF THE

United States

OCTOBER TERM, 1984.

Computervision Corporation, Petitioner,

V.

THE PERKIN-ELMER CORPORATION, Respondent.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Federal Circuit.

OPPOSITION TO PETITION FOR A WRIT OF CERTIORARI

OPINIONS BELOW

The opinion of the Court of Appeals for the Federal Circuit rendered in this case on April 6, 1984, has been officially reported at 732 F.2d 888.

STATEMENT OF THE CASE

The statement of the case provided by the Petitioner requires some amplification to present a more balanced picture of the case to this Court.

The two patents in suit, Offner No. 3,748,015, and Scott No. 3,821,763, while related in that the principles of both are employed in the Perkin-Elmer and Computervision optical systems, are nonetheless directed to different inven-

tions. The Offner patent is directed to a specific optical system employing, among other things, a convex mirror and a concave mirror spaced relative to each other such that a corrected image, i.e., an essentially perfect one, is obtained. That perfect imagery is obtained by moving the convex mirror a small but extremely significant distance from the location it would assume if the two mirrors were concentric and the radius of curvature of the convex mirror was one-half that of the concave mirror. The necessary spacing of the mirrors can be obtained either by increasing the radius of the convex mirror while keeping the mirrors concentric, or by keeping the radius of the convex mirror one-half that of the concave mirror and slightly separating the centers of curvature.

The Scott patent is directed to the concept of preferentially correcting an optical system so that a small part of it produces perfect imagery, restricting what the optical system sees only to the portion that creates perfect imagery, and scanning the optical system across the scene to be viewed so that a perfect image of the entire scene can be recorded by photosensitive material.

The evidence established that those skilled in the art found the Offner invention "astounding", and the Scott invention "a radical departure from traditional optical practice."

Perkin-Elmer's projection printer, having as its critical element an optical system employing the inventions of both the Offner and Scott patents, was the first commercially successful projection printer for use in manufacturing semi-conductor integrated circuits, and was an outstanding commercial success. It had numerous advantages over previous printers, became the industry standard, revolutionized the industry and satisfied a long felt need.

After a number of unsuccessful efforts to design its own optical system, Computervision decided to copy the Perkin-Elmer system: after several modifications, Computervision settled on one that was virtually the same as Perkin-Elmer's. The only difference was that in the Computervision system, the radii of the two mirrors were kept the same and the centers moved, while in the Perkin-Elmer system, the centers were kept concentric and the radius of the convex mirror slightly increased. In both systems, the convex mirror ended up at the same place relative to the concave mirror. In both systems, perfect imagery was obtained as a result of the positioning of the convex mirror. All of the witnesses who testified on the point, whether put forth by Perkin-Elmer or Computervision, agreed that the arrangement of the mirrors in the two systems was equivalent, i.e., they accomplished substantially the same result and worked in substantially the same way. The Court of Appeals for the Ninth Circuit found that the differences between the two systems are "miniscule" (680 F.2d 669, 671).1

At the trial, in its post-trial motions, and on both appeals (and in its Petition), Computervision asserted that Reed patent No. 3,190,171 showed a system that made invalid the Offner patent.² At the trial level, the jury rejected Computervision's argument and returned a verdict that the Offner claims were valid. In the first appeal, Computervision argued to the Ninth Circuit that if the claims of the Offner patent were construed to cover the Computervision system, the claims would also cover Reed and be invalid. The Ninth Circuit disagreed.

¹The statement on page 3 of the Petition that there are "marked differences" between the two devices is unsupported by the record and contrary to the law of the case.

²In its appeal to the Federal Circuit Computervision made virtually no argument relating to the Scott patent and makes none here.

When the case was returned to the trial court, extensive briefs were filed and an oral argument was had on the question of validity, Computervision once again urging the Reed patent as invalidating prior art. After reviewing the briefs and hearing the argument, the District Court stated that the findings of the jury supported a conclusion of non-obviousness, that there was considerable evidence supporting those findings, and that non-obviousness was clear as a matter of law. The court then entered its judgment that both patents were valid and infringed. Subsequently, the District Court denied Computervision's motions for judgment notwithstanding the verdict and for a new trial, which motions were based primarily on its arguments concerning the Reed patent.³

On its appeal to the Federal Circuit, Computervision once again advanced its contentions with regard to the Reed patent. Once again they were rejected, for they simply have no merit. As the Federal Circuit said:

"The Reed patent (3,190,171), considered by the PTO, discloses a viewing system simulating the appearance of an aircraft carrier as the pilot approaches for a landing. The system employs concentric convex and concave mirrors with a radii ratio of 2:1. The image system of the carrier is not of unity magnification and is a viewing, not an image forming, system; the carrier image is a virtual, relatively poor image, whereas claim 1 [of Offner] requires formation of a real, stigmatic image; it involves a 2:1 mirror system, whereas claim 1 involves a non 2:1 system. Though Reed said he modified his system to achieve a non-concentric 2:1

³It is these actions by the District Court that illustrate its real belief and refute Computervision's argument (Petition, p. 5) that the District Court agreed with its contentions.

system, the modified system does not correspond to the concentric non 2:1 system of the '015 patent.

"Computervision urges that the Reed disclosure be viewed backwards, i.e., as a system for forming an image of the pilot's eye. There is no evidence that those of ordinary skill in the art would so view it, and such distortion of a reference in light of a patentee's disclosure is pure hindsight." (732 F.2d 896, 897)

REASONS FOR DENYING THE WRIT

This is a routine patent case in which the losing party is, not surprisingly, unhappy with the outcome. Computervision has previously presented its arguments to the jury, the District Court, the Court of Appeals for the Ninth Circuit, and the Court of Appeals for the Federal Circuit. In each instance it has been rebuffed. It now seeks to have this Court involve itself in this private dispute and give it another chance to try to accomplish what it so singularly has been unable to accomplish thus far. The record establishes that no matter how many chances Computervision might be given, it could not succeed, because the patents in suit are clearly valid. But, more importantly here, Computervision has set forth in its Petition no sufficient reason for this Court to grant the writ requested, and it should be given no further opportunities to replow old ground.

In an attempt to make this case seem more than it is—a controversy between two private parties—Computer-vision has asserted that it could have far reaching ramifications because, it says, the comments of the Court of Appeals for the Federal Circuit with regard to the procedure followed run counter to the "directive" of this court in Altvater v. Freeman, 319 U.S. 359 (1943) and Electrical Fittings Corp. v. Thomas & Betts Co., 307 U.S. 241 (1939). Because this assertion is central to the first two reasons for

granting the writ urged by Computervision, we will deal with it first.

A. The Comments of the Court of Appeals Were Not Contrary to Any Instructions or Directives Issued by This Court

Computervision expresses concern over the comments by the Court of Appeals with respect to the procedural aspects of this case, specifically the initial entry of a judgment dealing with only a portion of the jury's verdict—non-infringement. But the Court of Appeals only pointed out the obvious—the piecemeal entry of judgment and consequent multiplicity of appeals unnecessarily consumes judicial time and effort. The Court of Appeals set forth no binding rule of law or procedure that must be reviewed by this Court.

Computervision's arguments that the Court of Appeals' comments were contrary to some ironclad rule of procedure laid down by this Court in Altvater and Electrical Fittings are simply wrong. Neither of those cases set forth any instruction or directive that are to be followed in every case, and both were quite different on their facts than the present case. The Altvater case, the closer on the facts, and apparently the case principally relied on by Computervision, produced a result directly contrary to that which Computervision urges it for.

In Altvater, the Court distinguished Electrical Fittings, pointing out that in the latter there was only a bill of complaint and an answer, while in Altvater there was also a counterclaim for a declaratory judgment that the patents in suit were invalid. In those circumstances, the Court held, there was still a dispute between the parties that should be litigated. The Court accordingly reversed the Court of Appeals decision that the validity issues were moot, and

remanded the case for consideration of those issues, even though the patents had been found to be not infringed. In the present case, Computervision also counterclaimed for a declaratory judgment that the patents were invalid.

That this Court has issued no directive that validity should not be considered once non-infringement has been found is clear from Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327 (1945), a case decided only two years after Altvater. In Sinclair & Carroll, the Court criticized the tendency of lower courts to dispose of cases on the grounds of non-infringement without reaching the validity issue. The Court said that the District Court had followed the better practice of deciding validity as well as infringement. At most, that is all that the Court of Appeals was suggesting in the present case.

That the Court of Appeals for the Federal Circuit recognizes that in the proper situation only non-infringement need be determined is apparent from its recent, and as yet unreported, decision in Nestier Corporation v. Menasha Corporation, Appeal No. 83-1313, decided August 1, 1984. In the circumstances present there, the court recognized that since the patent had been judged to be not infringed, an adjudication that the patent was valid would be to decide an unnecessary question as between the parties (Slip opinion, p. 10). Computervision's expressed fear that the present case would somehow set a precedent that would prevent courts from following Electrical Fittings is thus shown to be without foundation.

B. Computervision Was Not Denied Its Right to a Jury Trial

Computervision's assertion that it was denied a jury trial on the factual inquiries of *Graham v. John Deere Co.*, 383 U.S. 1 (1966) is based on speculation and a misconception

of the doctrine of equivalents and its relationship to the validity of a patent.

Computervision had a jury trial on the Graham issues. The evidence on these issues was presented in great detail, the jury was properly instructed by the District Court, and the jury returned a verdict against Computervision. Computervision argues that the jury, in finding validity, had a particular interpretation of the claims in mind. But as the Court of Appeals for the Federal Circuit rightly pointed out, this argument depends on facts merely presumed and not established; it is not at all necessary that the Ninth Circuit adopted a different interpretation of the claims in reaching its conclusion that the Computervision optical system was essentially the same as the patented optical system (732 F.2d at page 899).

Indeed, it seems clear that the opposite must be true. A case cited by Computervision (Petition, p. 16) Carman Industries, Inc. v. Wahl, 724 F.2d 932 (Fed. Cir. 1983), demonstrates why this must be so. As pointed out by the Court in Carman, the doctrine of equivalents cannot be applied in aid of a finding of infringement if doing so results in the invalidity of the claims in view of the prior art. In other words, the Ninth Circuit could not properly construe the claims so as to nullify the finding of validity made by the jury, nor its own presumption of validity. Computervision argued to the Ninth Circuit that any interpretation of the claims that would have them encompass the Computervision apparatus would invalidate them. The Ninth Circuit disagreed and found infringement even taking the prior art, including Reed, into account.

^{*}Computervision seems to argue (Petition, p. 12) that an improvement to a patented system should be free from a finding of infringement. The law is to the contrary. *Temco Co.* v. Apco Co., 275 U.S. 319 (1928).

What Computervision is really attacking here is not the decision of the Court of Appeals for the Federal Circuit, but the decision of the Court of Appeals for the Ninth Circuit. But no writ was sought or granted in connection with the latter decision, and it is far too late to question it now.

The jury properly returned a verdict of patent validity. It was supported by substantial evidence. The District Court independently reviewed the evidence in light of *Graham v. John Deere Co.*, found that it supported the jury's verdict, and entered an appropriate judgment. The Court of Appeals for the Federal Circuit properly affirmed that judgment. There is no need for, nor right to, another jury trial on precisely the same issues.

C. There Was No Inconsistency Between the Opinions of the Federal and Ninth Circuit Courts of Appeal

Computervision's argument in support of its third reason for review is based on a distressingly inaccurate statement of the record, a mischaracterization of the opinion of the Court of Appeals, and a logical grotesquerie. It presents as fact the proposition that there was a Reed system that was non-concentric and 2:1 in the same way that the Computervision system was non-concentric and 2:1. There was no such evidence. It asserts that the Court of Appeals for the Federal Circuit emphasized, in distinguishing the Offner patent from the Reed patent, that the Reed patent employed concentric mirrors, which mirrors had a ratio of the radii of 2:1 (Petition, pp. 14, 15). While the Court did note those differences, what it emphasized was that the Reed patent was directed to a system entirely different in concept and construction than Offner, as pointed out on pages 4 and 5 of this brief.

As found by the three courts that have reviewed the evidence, there simply is no relationship between Reed and

Offner, nor between Reed and the Computervision optical system. There is, however, a definite relationship between Offner and the Computervision system — they are for all intents and purposes the same.

The false premise in Computervision's "logic" is apparent. The Ninth Circuit looked at the similarities between the Computervision system and the patents in suit and found infringement. The Federal Circuit looked at the differences between the patents in suit and Reed and found validity. There is no inconsistency in these findings for the Computervision system is totally different from Reed.

CONCLUSION

For the reasons given above, the writ should be denied.

Respectfully submitted,

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